

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Amendment of Part 22 of the Commission's)	
Rules to Benefit the Consumers of)	
Air-Ground Telecommunications Services)	WT Docket No. 03-103
)	
Biennial Regulatory Review—Amendment)	
of Parts 1, 22, and 90 of the Commission's)	
Rules)	

To: The Commission

REPLY COMMENTS OF AIRCELL, INC.

AirCell, Inc. ("AirCell"), by its attorneys, hereby submits these reply comments in response to the Commission's Notice of Proposed Rulemaking ("NPRM") in the above-captioned docket. ^{1/} AirCell was pleased to see that most of the comments evidenced a broad consensus on the main issues, and were largely consistent with AirCell's views. For example, the record clearly supports the need to amend the outdated air-to-ground ("ATG") rules to facilitate new technologies and competition that can satisfy the growing demand for ATG services. In particular, the record also contains support for enabling the relocation of AirCell's operations to the ATG band. Finally, all commenters addressing the issue agreed

^{1/} See Amendment of Part 22 of the Commission's Rules to Benefit the Consumers of Air-Ground Telecommunications Services, WT Docket No. 03-103, *Notice of Proposed Rulemaking*, FCC 03-95 (rel. Apr. 28, 2003) ("NPRM").

that the Commission should move cautiously before modifying or eliminating the airborne cellular ban.

I. Commenters Agree that the Strong Demand for ATG Services Supports a Revision of the ATG Rules

There is broad agreement among commenters that substantial demand exists for air-ground services, and that this demand is not being met by the current options in the marketplace. ^{2/} SITA, for example, noted that there is “almost an exact overlap between airline passengers and mobile telephone users,” the very market segment that has come to rely on the ability to communicate anywhere, anytime. ^{3/} Indeed, Qualcomm believes that an allocation of additional spectrum – as much as 60 MHz in total – will be needed to meet consumer demand for ATG services, including high speed broadband data services. ^{4/} However, given the complexities and lengthy delays typically involved in major spectrum allocations, AirCell believes the Commission should, as a first step, focus its attention on reform of the existing spectrum, so as not to delay the ability of consumers to obtain more affordable and more advanced ATG services.

^{2/} See, e.g., Qualcomm Comments at 4-5 (noting substantial interest in ATG services and high consumer demand for broadband services in particular); Verizon Airfone (“Airfone”) Comments at 4 (citing market study demonstrating demand for ATG services); Cingular Wireless (“Cingular”) Comments at 5-6 (demand for ATG services not being met by the single incumbent operator).

^{3/} See Societe Internationale de Telecommunications Aeronautique (“SITA”) Comments at 2.

^{4/} See Qualcomm Comments at 7-8.

The commenters also uniformly agreed that the outdated and overly restrictive ATG rules must be changed to accommodate new air-ground services and technologies that will enable affordable, advanced services to address the strong and growing demand for such services, as well as to promote efficient use of the band. 5/ As the American Mobile Telecommunications Association (“AMTA”) correctly noted, providing greater flexibility in the band would be consistent both with recent Commission decisions that have granted flexibility in other contexts, and with the statutory mandate that the Commission establish regulatory symmetry among similar services. 6/ Although there is wide support for making the ATG rules more flexible, commenters agreed with AirCell that the band should not be reallocated or altered to enable other non-ATG uses, given the very limited spectrum available in this band and the potential for interference. 7/

5/ See, e.g., Cingular at 4, 6; Qualcomm Comments at 6-7; Airfone Comments at 8-9. See also American Mobile Telecommunications Association (“AMTA”) Comments at 4 (the current rules “cannot be deemed a success The quality and cost of the [current] offering has suffered in comparison to the now ubiquitous cellular service.”).

6/ See AMTA Comments at 3.

7/ See, e.g., Cingular Comments at 6 (opposing use of band for terrestrial services); Qualcomm Comments at 8 (ATG spectrum must be dedicated). The Societe Internationale de Telecommunications Aeronautique (“SITA”) suggested that the band *could* be reallocated only *if* it were first determined that ordinary cell phones could be used while airborne without causing interference to terrestrial services. See SITA Comments at 4-5. As discussed *infra* at section III, such a technical conclusion is unlikely, based on the experience of AirCell and others.

II. Changes to the ATG Band Should Promote Competition, Rather than Foreclose the Possibility that Providers Such As AirCell Could Compete in the Band on an Equal Footing

A. AirFone's Proposal Would Stifle, Not Promote, Competition

Other commenters agreed with AirCell that any rule changes should promote competition in the provision of air-ground services within the ATG band itself. ^{8/} Airfone's request to have the FCC grant it exclusive use of the entire ATG band is fundamentally inconsistent with this principle. Airfone does not – and indeed cannot – cite any legal basis for the Commission to transform Airfone's current *de facto* monopoly into a *de jure* one.

None of the arguments proffered by Airfone to justify its requested spectrum grab withstand even the most cursory scrutiny. Contrary to Airfone's assertion, a licensee is not entitled to exclusive spectrum simply because it has made "significant investment," undertaken "substantial business and financial risks," and "work[ed] hard." ^{9/} In an effort to make its request sound reasonable, Airfone exaggerated the level of competition in the air-ground market, alluding to an "array of choices" soon to become available, yet citing only two satellite services, one of which involves such high installation costs that it may only be suitable for long-haul flights, and not for the much greater number of shorter, domestic

^{8/} See, e.g., Qualcomm Comments at 7-8; Cingular Comments at 6; SITA Comments at 4; AMTA Comments at 3 (citing FCC precedent focused on "promoting competitive options").

^{9/} Airfone Comments at 11-12.

flights. 10/ At the same time, Airfone curiously omitted any mention of AirCell, which has entered the commercial aviation market. Airfone also asserted that the ATG band is “unattractive” to other carriers for reasons unrelated to the current technical rules. 11/ This argument is particularly untenable now that AirCell is on record as being interested in exploring opportunities in the ATG band once more flexible technical rules are in place.

As AirCell made clear in its initial Comments, the Commission should take no action that would permit Airfone to preserve its current monopoly position in the ATG band. AirCell is concerned by the fact that Airfone is already using the grant of its recent experimental license to suggest to airline carriers and others in the industry that it is poised to offer broadband service in the near future. 12/ By making such suggestions – apparently without explaining that major Commission rule changes would first be required – Airfone may be attempting to “freeze out” competition in the commercial air-ground market. Airlines currently without ATG

10/ See Airfone Comments. at 5-7; see also AirCell Comments at 5 (discussing the high installation costs often associated with satellite service).

11/ See Airfone Comments at 13.

12/ See, e.g., “News Headlines,” *Gethin’s Inflight News*, available by subscription at <<http://www.gethinsinflight.com>> (Oct. 17, 2003) (reporting that “Verizon is targetting 2005 for broadband implementation, leveraging its existing license, spectrum and ground network. The company has just received an experimental license to allow it to test broadband within its existing narrowband frequency. . . . Broadband will require a new directional antenna to be installed on the aircraft and both the ground and air systems to be upgraded.”).

service 13/ may be reluctant to partner with a competing provider (such as AirCell) if they believe Airfone will be able to deliver broadband in the near term. AirCell urges the Commission to take this opportunity to remind Airfone, and to clarify for the broader aviation industry, that Airfone cannot provide a commercial broadband service based on its current experimental license, and that, by suggesting a broadband implementation date, Airfone inappropriately pre-supposes that the Commission will adopt its recommendations in this rulemaking docket. 14/

B. AirCell's Potential Competitive Entry into the ATG Band Is Supported by Other Commenters, and AirCell Satisfies the Market Entry Criteria Suggested by Airfone

As stated in its Comments, AirCell believes that a modified ATG band could provide a good “home” in which to relocate and/or expand its service. 15/ AirCell is not alone in this opinion. Cingular stated that the ATG band rules “should be revised to give companies, such as AirCell, the incentive and ability to use spectrum dedicated to commercial air-ground service for their service offerings.”16/ Indeed, Cingular went on to suggest that “AirCell’s air-ground service should be moved from cellular spectrum to the air-ground band as soon as

13/ This includes the significant number of carriers, for example, that previously partnered with the now-defunct Claircom ATG provider.

14/ Among other reasons, Airfone’s experimental license, based on its own requested parameters, is limited to the operation of 10 mobile units during the hours of 12 a.m. and 3 a.m. See Verizon Airfone, Inc., Experimental License Application, File No. 0186-EX-PL-2003.

15/ See AirCell Comments at 10.

16/ Cingular Comments at 6.

possible.” 17/ Moreover, even Airfone’s affiliate company, Verizon Wireless, used a substantial portion of its comments in this proceeding to express its concern about AirCell’s continued operations in the cellular band, 18/ which logically suggests that it, too, would support AirCell’s relocation to a band specifically dedicated for ATG use.

Through the use of its recently-acquired experimental license, AirCell is actively working to determine what technical rule changes it will recommend to the Commission to enable its possible entry into the band. 19/ As part of this process, AirCell is attempting to identify a technical means that would enable more than one digital, broadband provider to operate in the band. AirCell notes that this contrasts with Airfone’s foregone conclusion that sharing within the band is foreclosed by technical considerations and that it “must have” exclusive use of the majority of the band in order to provide advanced broadband services. 20/

AirCell’s active and growing participation in the air-ground market debunks Airfone’s implication that no other carrier would be willing to make the commitments necessary to deploy air-ground services in the ATG band. AirCell is familiar with FAA regulations, aeronautical engineering, aircraft equipment

17/ *Id.* at 10.

18/ *See* Verizon Wireless Comments at 3-9.

19/ Given that both AirCell and Airfone both have ongoing experimentation using new technologies in the band, AirCell agrees with Airfone that it is too early to set specific technical parameters for the ATG band.

20/ *See* Airfone Comments at 10.

installation practices, and forming partnerships with airlines. 21/ AirCell is also accustomed to expending substantial resources and having to install equipment both on the ground as well as on aircraft. 22/ In other words, AirCell has already surmounted all the “formidable challenges and unique business risks” that Airfone suggested will scare off any new entrants into the ATG band. 23/ AirCell is also positioned to leverage its existing infrastructure which, as Airfone itself correctly noted, enables deployment costs to be kept to a minimum. 24/ Indeed, in the context of AirCell’s service to general aviation customers, AMTA recognized that AirCell’s ability to leverage cellular network infrastructure results in a service that “undoubtedly offers both greater capacity and more sophisticated technology than available on traditional general aviation air-ground systems.” 25/

21/ See Airfone Comments at 14 (“[A]irlines expect their communications partners to understand aeronautical engineering standards, installation practices, and FAA certification regulations.”). Airfone’s overt omission in its comments of AirCell’s presence in the air-ground market brings Airfone’s credibility into question with regard to its assessment of the ATG band and the likelihood future competition within the band. The omission is especially notable given that AirCell satisfies the very criteria for a successful ATG band operator that Airfone itself has enumerated.

22/ See Airfone Comments at 13 (pointing out that to provide air-ground service, equipment must be installed in the aircraft and on the ground).

23/ See Airfone Comments at 14.

24/ See Airfone Comments at 10.

25/ AMTA Comments at 5.

III. The FCC Should Evaluate Interference Concerns Before Making Rule Changes Affecting Airborne Cellular Use or the ATG Band

Airborne Cellular Rule. Citing the realistic potential for interference to terrestrial users, commenters were in near unanimous agreement that the airborne cellular rule, 47 C.F.R. § 22.925, should not be completely eliminated. 26/ Even SITA, which supports an eventual elimination of the rule, agreed that the ban should not be removed prior to a demonstration that doing so would not result in interference to other users. 27/ Based on its own experience and that of others, AirCell believes that SITA's expectation that *ordinary* mobile phones can be used while airborne without causing interference is overly optimistic. 28/ However, despite Verizon Wireless's conclusory statement to the contrary, 29/ handsets can be modified or controlled in a manner that protects against harmful interference and the rule should therefore be modified to permit the use of such handsets.

ATG Band. AirCell agrees with AMTA and Motorola that air-ground services should not interfere with public safety users (or any users, for that matter)

26/ See, e.g., Verizon Wireless Comments at 9; Cingular Comments at 11; Qualcomm Comments at 11. Moreover, commenters also suggested that the Commission adopt a similar prohibition on the use of PCS handsets on board aircraft. See, e.g., Verizon Wireless Comments at 9; Cingular Comments at 17; Qualcomm Comments at 10.

27/ See SITA Comments at 6.

28/ For this reason, the ATG band will still serve an important function and should not be reallocated.

29/ See Verizon Wireless Comments at 9. Even if AirCell's current operations did cause harmful interference – which they do not – such a supposition would not support Verizon Wireless's conclusion that no technological development exists that could enable the non-interfering use of modified cellular equipment.

in neighboring bands. 30/ Likewise, however, the Commission should not permit those users to interfere with or otherwise constrain operations within the ATG band. As AirCell explained in its comments, improving air-ground communications capabilities on commercial airliners has both important public safety and homeland security implications. 31/ Finally, as commenters indicated, the Commission should avoid providing for any terrestrial uses of the ATG band that would cause interference. 32/

IV. Attacks on AirCell's Use of the Cellular Band Are Inaccurate and Not Relevant to this Proceeding

In their comments in this proceeding, Verizon Wireless devoted six pages and Cingular devoted seven pages 33/ to a detailed discussion of technical issues that continue to be thoroughly examined in WT Docket No. 02-86, an active docket pertaining to a requested extension of AirCell's waiver of the airborne cellular rule. The allegations that AirCell's operations cause harmful interference in the cellular band are wrong, as AirCell has demonstrated through exhaustive

30/ See AMTA Comments at 4; Motorola Comments at 3.

31/ Thus, it would make no sense to reallocate the ATG band for public safety/homeland security uses as one lone commenter suggested. See Tony Drake Comments at 1. Indeed, given recent history and the existing state of air-ground capabilities on most aircraft, reallocating the ATG band for terrestrial users would arguably be antithetical to the nation's overall public safety needs.

32/ See, e.g., Cingular Comments at 6-7. AirCell notes that low power terrestrial use by ATG licensees is already permitted under the current rules. See 47 C.F.R. § 22.859(a). AirCell believes that continuing to allow such use is in the public interest, but only to the extent no interference is caused to primary ATG operations.

33/ See Verizon Wireless Comments at 3-9; Cingular Comments at 8-15.

technical analyses submitted in that docket. The Commission has repeatedly held (and the D.C. Circuit has agreed) that AirCell's use of specially modified equipment enables it to operate without causing harmful interference to terrestrial operations. 34/

The attempt by Verizon Wireless and Cingular to "re-litigate" the AirCell waiver issues in this new rulemaking docket is both inappropriate and irrelevant. It is, however, illustrative of the ongoing opposition that AirCell continues to face after almost five years of operating in the cellular band under the FCC waiver, and strongly suggests cellular licensee support (explicit support in Cingular's case) for moving AirCell's operations to the ATG band.

34/ See AirCell, Inc., Petition, Pursuant to Section 7 of the Act, For a Waiver of the Airborne Cellular Rule, Or, in the Alternative, for a Declaratory Ruling, *Order*, 14 FCC Rcd 806 (WTB 1998) ("*AirCell Bureau Order*"), reconsideration granted in part, denied in part, *Order on Reconsideration*, 14 FCC Rcd 19430 (WTB 1999) ("*AirCell Reconsideration Order*"), review denied, *Memorandum Opinion and Order*, 15 FCC Rcd 9622 (2000) ("*AirCell Commission Order*") (together the "*AirCell Waiver Orders*"), review granted in part, denied in part, *AT&T Wireless Servs., Inc. v. FCC*, 270 F.3d 959, 968-69 (D.C. Cir. 2001) ("*AT&T Wireless Servs.*"), reh'g denied (Jan. 29, 2002); *Order on Remand*, 18 FCC Rcd 1926 (2003) ("*Order on Remand*"), review filed (D.C. Cir. Feb. 26, 2003).

CONCLUSION

As described above, the majority of the comments expressed positions consistent with AirCell's views that: the restrictive ATG rules should be amended to facilitate new technologies and competition that can satisfy the growing demand for ATG services; the rules should be amended in way that would permit AirCell to provide new competition in the ATG band; and the airborne cellular rule should not be eliminated in its entirety.

Respectfully submitted,

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